PROJECT PROPOSAL: HANDBOOK FOR BUILDING ROBUST LOCAL STORMWATER PROGRAMS
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Summary

This is a proposal to develop a handbook to assist local governments in strengthening their municipal stormwater programs and building the capacity necessary to carry out actions necessary to provide desired service levels, protect water quality, comply with regulatory requirements, and achieve collateral goals in urban water management. We propose to work with a contractor, EPA Regions 3 and 9, EPA Headquarters, and possibly the WEF Stormwater Institute and other key stakeholders to develop a written handbook addressing:

- Key program characteristics and capabilities, including the need to make the "business case" for robust stormwater management (benefits and avoided costs of better stormwater management)
- The importance of long term planning to set goals and identify needed future actions/investments
- The role of asset management planning systems in tracking and maintaining current assets and accounting for new ones
- Key strategies to carry out successful program outreach, marketing, and public involvement activities necessary to secure adequate program support and resources
- Key strategies for organizing municipal stormwater programs as independent utilities or components of larger municipal water management enterprises
- The importance of long term financial planning, taking into account funding needs, revenue sources, affordability considerations, and their connection to long term program commitments.

We anticipate placing a contract task order through the HQ OWM-WPD contract with ERG to be funded (ideally) with EPM funding contributions from Headquarters and interested Regions. Regions 3 and 9 have already committed funds for this effort. We anticipate obtaining in-kind project assistance from WEF, NMSA, CASQA and the State of California. We propose to fund the project at the $100,000 level, which should enable production of a final handbook following engagement with interested stakeholders and EPA offices during its preparation. The handbook would explain why particular program elements are important and need to be developed cohesively, and and how they can be developed, drawing heavily upon existing case studies to illustrate how peers have done these things and showing the benefits they have yielded. This would not be a guidance document per se; it would represent a compilation of model program best practices and findings from organizations that have evaluated key attributes of successful municipal stormwater programs. The handbook would also enable us to highlight the utility of new, innovative, planning, tracking, and implementation tools that enable better stormwater management at lower cost. This handbook would build upon and reference other related efforts by EPA and other organizations to build stormwater program capacity, focusing on how these key program elements fit together into an integrated whole that is critical to building a successful program over time.

Background

Many organizations are trying to assist local stormwater programs in improving their capacity to succeed in protecting water quality, providing desired service levels, and achieve collateral goals in urban water management. Most local municipal programs are skill-challenged and inadequately staffed in many key program elements that together comprise a professional, forward-thinking managerial enterprise. Some of the key areas urgently needing support include:

- Enabling use of tools to guide effective short term municipal operations and oversight of necessary actions by landowners and parties that discharge stormwater,
- Building tools for carrying out long term planning addressing system O&M, base program operations, and capital investment needs to maintain existing assets, renew failing infrastructure and meet new water management requirements (e.g. NPDES MS4 permits and TMDLs) and opportunities (flood control, supply augmentation, green streets, and improvement of urban quality of life),
- Financial planning strategies that address short and long term O&M and capital needs and consider community financial capacity and funding options,
- Frameworks for working with permitting authorities to devise permit approaches that spur more effective, timely actions to protect water quality and address other urban water goals, and
- Tools and strategies to guide building support for local programs necessary to secure adequate funding to accomplish short and long term needs.

Many ongoing efforts to improve state and local capacity to address municipal stormwater are addressing individual areas of need without recognizing how they relate to and depend upon each other. In other words, addressing any one or two of the key areas listed above without addressing the others will not enable communities to build the overall capacity to succeed in the long run. Developing and applying an overarching program development handbook will greatly assist efforts to build understanding of the need to interlink these types of planning and analysis to build an integrated set of technical, managerial, financial and planning skills and capabilities in municipal programs.

At times, however, it can be difficult to persuade busy local program managers of the urgent need to build capacity in these different areas, many of which currently seem beyond their reach. Similarly, it has been difficult for EPA, states, and interested partners to evaluate the relative urgency of need in developing capacity in these different topic areas

Reducing these related elements of MS4 program planning and financial planning to a set of basic core program elements provides the framework for the proposed handbook. We expect the handbook may follow this basic outline:

Handbook Overview

1. Identify Basic Program Goals, Elements and Attributes

Key questions: How do you set key program goals and objectives, and why are they critical? How do you make a "business case" to the public and local government leaders about the importance of the program.

Drivers: Local programs need to articulate their goals, vision, and service objectives in ways that resonate with community values and priorities.

Recommended product: Program mission statement articulating its purpose, goals, and vision for the future, which will help guide development of long term plans and public outreach/involvement strategies.

Needs the Handbook Will Address: Explanation of why articulating program goals and vision are important to success, and suggestions on how to do this, with examples. Suggestions on how to build

the stormwater program "business case."

2. Develop Holistic Long-Term Program Plan

Key questions: What actions does your program need to take in the way of capital investments in infrastructure, O&M of existing assets and infrastructure, and administration of your program, taking into account a holistic view of what a local stormwater program needs to do to address water quality, flood protection, supply augmentation, urban greening, and other collateral goals? What key capabilities does the program need to develop?

Drivers: We need holistic program plans to show permitting authorities what will be done, where, and when, to address basic program goals and regulatory requirements, and to make the business case for funding the program to funders, the public, and elected officials.

Recommended Product: Long term stormwater program plan.

Needs the Handbook Will Address: Discussion of why long-term plans are critical to successful long term program management and securing funding necessary for program operations and new capital investments.

3. Develop Asset Management Capability

Key questions: What resources and assets does the program currently track and manage and expect to manage in the future? How do we determine what assets need attention and when? How can we identify resources needs for asset O&M, and and new investments to replace or create new infrastructure? How can we efficiently track and report on program management?

Drivers: We need an asset management system capable of tracking all system assets and guiding scheduling of system inspections, maintenance, replacement, and new infrastructure installation. The AMP system should be capable of supporting short and long term financial planning to assist securing needed resources and guiding expenditures.

Recommended Product: Asset management planning system.

Needs the Handbook Will Address: Discussion of why asset management is critical to program success and suggestions on how to develop asset management systems tailored to stormwater programs

4. Improving Communication and Buy-In: Strategies for Demonstrating How the Program Effectively Meets Local Needs and Goals that the Public Values

Key questions: How can communities create effective strategies for demonstrating program value and building support with public and key opinion leaders as necessary to obtain sustainable support and funding? How can this "business case" best be communicated?

Drivers: Communities need help in developing strategies for demonstrating the value of sound stormwater management, showing how sound stormwater management aligns with local goals and values, successfully marketing their programs with the public and local opinion leaders/decision makers, and using these strategies to assist developing stable funding commitments and arrangements.

Recommended Product: Program communication strategy and tools tailored to demonstrating program competence and assisting making the case for sustainable funding.

Needs the Handbook Will Address: Discussion of why generic public outreach is not enough to build program support, and how local programs can more effectively demonstrate their competence, ability to meet local priorities and goals, and reliability to make good use of public funds. Discussion of how programs can identify and publicize benefits of improved stormwater management to the public, including avoidance of costs of insufficient water management (flooding, supply shortages…) Discussion of key building blocks for a successful strategy to build program legitimacy.

5. Optimize Program Organization Within and Across Jurisdictions

Key questions: What are the best approaches to stormwater program organization and governance? What are the pros and cons of organizing as a separate utility, or of becoming part of a larger water enterprise? How can we successfully form a utility or otherwise improve our governance structure to improve program ability to succeed? How can local programs share stormwater management functions and resources with neighboring jurisdictions to build collective capacity at lower overall cost?

Drivers: Program organization matters. Many stormwater program operate as poorly coordinated ad hoc enterprises spread across different local government departments and lacking coherent governance and stable funding. Local programs need to ensure that their governance structures enable them to influence, and succeed, in addressing public and decisionmaker expectations for stormwater management and securing the sustainable funding necessary for success. Moreover, many community stormwater programs have not built cooperative relationships with neighboring communities to enable more efficient delivery of services by sharing resources and assets across jurisdictions.

Recommended product: Assessment of governance structure and options, and strategy for changes in structure if warranted. Assessment of opportunities to collaborate with neighboring jurisdictions to share resources in delivering program services.

Needs the Handbook Will Address: Discussion of why governance and organizational structure matter, and how successful programs have created more robust, sustainable governance structures. Discussion of strategies for organizing a stormwater utility or alternative governance structure. Discussion of options for consolidating all or some stormwater program services and associated resources with neighboring jurisdictions.

6. Develop Long-Term Financial Plan

Key questions: What are the short and long-term program costs, potential revenue sources, funding shortfalls, community ability to afford stormwater services, and strategies for addressing funding shortfalls. What opportunities are there to adjust implementation timeframes based on financial constraints? How can local programs develop the funding capacity to implement the program they want to implement and not be limited by existing funding constraints?

This section would be divided into several subsections that would guide development of an integrated funding plan and strategy.

How much will the program cost?

*Key questions: W*hat are the projected short and long-term costs to implement this plan, taking into account capital, O&M, staffing, and administrative costs?

Drivers: Communities need better costing information for their programs to make the business case for funding through fee programs (focusing on the public and elected officials), loans (SRF or local underwriters), grantors, or P3 partners.

Recommended Product: Program cost estimate based on Capital Improvement Plan and Asset Management Program projections.

Needs the Handbook Will Address: Discussion of the elements of comprehensive cost analysis, and review of available cost estimation methods and examples.

How much funding do you have?

Key questions: What are your existing revenue streams now and in the foreseeable future, taking into account general funds, grants, and other reasonably likely sources?

Drivers: We cannot responsibly plan without projecting likely available funds and evaluating gaps between needed and available funding levels. Many communities have been adversely affected by the inability secure steady operating or capital improvement funds.

Recommended Product: Program finance portfolio incorporating existing and projected funding streams and estimates of reliability of those funding streams into the future.

Needs the Handbook Will Address: Discussion of how local programs account for and plan revenue streams and combine different funding sources.

How much more funding do you need?

Key questions: How much work can you fund, and what is your funding deficit, taking existing resources into account in comparison with your cost estimate?

Drivers: Identifying funding gaps is critical to making a business case to the public, elected officials, and funding organizations that more funding should be provided. There are no standard methods for comparing stormwater program costs and funding available for the purpose of developing reliable, persuasive estimates of funding needs.

Recommended Product: Program finance portfolio discussing funding gaps

Needs the Handbook Will Address: Discussion of methods for comparing stormwater program costs (both O&M and capital) with available funding projections, and methods for setting priorities for funding work when resources are inadequate to fully meet projected need.

How much can your community afford?

Key questions: How do we evaluate community ability to pay for stormwater services, taking into account wastewater management and possibly other water services? How does ability to pay fit into financial planning, program planning, and determination of regulatory responsibilities?

Drivers: Local programs are increasingly arguing that communities cannot afford full stormwater program implementation (when considering wastewater and drinking water program costs and cumulative local fiscal impacts). When it is determined that a community cannot afford projected program costs, available methods for adjusting program commitments, expenditures, and regulatory responsibilities have not been clearly explained.

Recommended Product: Financial capacity assessment and analysis of options for addressing financial shortcomings in long term program planning and determination of regulatory requirements.

Needs the Handbook Will Address: Discussion of how financial capability assessment methods can be used by local stormwater programs to assess community ability to pay and support engagement with regulatory authorities to adjust regulatory responsibilities and compliance timeframes (e.g. through use of NPDES permit compliance schedules).

How much funding can you get?

Key questions: How can we assess community willingness to pay fees or taxes, and capability to obtain other funding through general funds, related department funds, loans, grants, or P3s?

Drivers: Communities need to assess ability to raise funds through different sources but lack experience and methods guidance.

Recommended Product: Program finance portfolio, fee feasibility assessment, and assessment of other potential funding sources.

Needs the Handbook Will Address: Review of most promising funding sources and suggested process for setting up a fee program.

7. Assembling the Pieces: Combining Asset Management, Long Term Planning, and Financial Planning

Key questions: How do these key program elements fit together to make a complete, robust program? How can these program elements be used to better plan and manage program elements and activities? How can these program elements be used to demonstrate to the public, elected officials, and regulatory agencies that the program is effective and successful?

Drivers: Program managers need advice and support on how to assemble different program planning elements and use them to manage program operations and communications.

Recommended Product: Examples of how stormwater managers highlight their use of coordinated planning and budgeting tools to improve program planning, operations, and communications.

Needs the Handbook Will Address: Discussion of strategies for aligning the use of asset management, long term planning, and financial planning tools to support program planning and operations, and examples illustrating the value added from taking these approaches.